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Contraception and Induced Abortion in Armenia: A Critical Need for Family Planning Programs in Eastern Europe

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Introduction

Induced abortion contributes to high rates of maternal mortality worldwide and continues to be an important cause of preventable morbidity among women of reproductive age.¹ In the countries of Central and Eastern Europe and the newly independent states of the former Union of Soviet Socialist Republics (USSR), abortion rates are among the highest in the world (from 30 per 1000 women-years of reproductive life in Armenia to 105 per 1000 women-years of reproductive life in Russia).^{2,3} It is estimated that nearly 6 million legal abortions and an equal number of illegal abortions are carried out annually in these countries.⁴ Although it is likely that the related morbidity is high, few data exist on the health consequences of induced abortion for women (such as inflammatory disease and infertility) or on the costs to the national health care systems.

Armenia, previously one of the most stable regions of the former USSR, has suffered several recent socioeconomic setbacks and natural disasters, including a breakdown of its economic system, an earthquake in 1988, and a conflict in Nagorno-Karabach. These events have undermined the public's health, as evidenced by a decline in total fertility rates from 2.6 in 1985 to 1.7 in 1994 and an increase in the maternal mortality rate from 22.4 to 34.7 per 100 000 live births between

1985 and 1995.⁵ In addition, infertility rates in Armenia increased from 18% in 1980 to 24% in 1990.

Here we present the results of a pilot study conducted on a sample of 200 women admitted to the Armenian Research Center of Maternal and Child Health Protection in Yerevan. The purpose of this study was to determine the number of induced abortions among women attending the abortion clinic as well as their reasons for selecting induced abortion. For a subset of these women, contraceptive knowledge, attitudes, and practices were also assessed.

Methods

Between October 1994 and January 1995, women consecutively attending an abortion clinic in Yerevan, Armenia

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ABSTRACT

Objectives. The purpose of this study was to determine the number of induced abortions per woman and the reasons for selecting induced abortion among parous Armenian women.

Methods. A consecutive series of 200 women attending an abortion clinic in Yerevan, Armenia, were queried by a physician about their reproductive histories.

Results. Women younger than 20 years of age reported a median of 1 and women older than 40 years reported a median of 8 induced abortions in their lifetimes (overall median = 3). Lack of contraceptive information was the major reason cited for not using contraception.

Conclusions. Induced abortion is the major form of birth control among parous Armenian women. Concerted public health campaigns are needed to inform women and their physicians in Armenia and other Eastern European countries about alternative contraceptive methods. (*Am J Public Health*. 1998;88:803-805)

($n = 200$), were interviewed by a physician about their reproductive lives. All women requesting an abortion at the clinic were eligible for the study. Information on induced abortions was available for all 200 women. The final 68 women—recruited during the third month of the study—were also queried about their contraceptive practices.

Anonymous, structured interviews were conducted in private at a time convenient for each woman. A trained physician interviewer explained to each participant the purpose of the project, that is, to help alleviate the adverse health consequences of induced abortion and to assess its impact on service delivery.⁶ The confidentiality of all reports was maintained.

Preliminary analyses showed that the distribution of the number of induced abortions per woman was skewed to the right. A log transformation was therefore performed on this variable. Differences in the number of induced abortions experienced by both age and years of schooling were assessed with the Armitage test for trend,⁷ based on analysis of variance of the log transformation of the number of abortions per woman.

Results

The 200 participating women were from 17 to 46 years of age (mean = 30.6, SE = 0.6) and were fairly well educated (mean number of years of schooling = 13.1, SE = 0.2). The overwhelming majority of women were Armenian (98%), Christian (99.5%), married (90%), and urban residents (95%). Most of the participants were employed (75%) and had living children at the time of the present induced abortion (89%).

In 88% of the cases, the decision to undergo the current induced abortion was made by the woman herself, without medical advice. Earlier pregnancies were terminated largely because women could not afford an additional child (39%) or because an additional child was unwanted (35%); health reasons were invoked in 12% of the cases. Clinical signs of infection were present at admission in 11% of the women.

The reported number of induced abortions per woman ranged between 1 and 25 (median = 3). As shown in Table 1, the median lifetime number of induced abortions increased with age, ranging from 1 for women younger than age 20 to 8 for women older than age 40 (P for trend = .0001). In contrast, there was no relationship between the reported number of induced abortions and women's years of schooling (P for trend = .45).

About half (55%) of the participating women reported never using contraception

TABLE 1—Distribution of Induced Abortions by Women's Age and Education: Yerevan, Armenia, 1994 ($n = 200$)

Characteristic	n	Median	Minimum	Maximum
Age, y				
≤20	9	1	1	5
21–25	43	2	1	11
26–30	52	3	1	15
31–35	48	4	1	14
36–40	34	5	1	15
≥41	14	8	1	25
P for trend ^a = .0001				
Education, y				
≤10	83	4	1	25
11–12	32	3	1	11
13–15	67	3	1	16
≥16	18	4	1	11
P for trend ^a = 0.45				

^aArmitage test for trend based on analysis of variance of the log transformation of the number of induced abortions per woman.

TABLE 2—Contraceptive Methods Used Most Often in the Past Year and in the Month of Conception among Parous Women: Yerevan, Armenia, 1994 ($n = 200$)

Method	Past year		Month of conception	
	n	%	n	%
None	109	54.5	173	86.5
Natural	13	6.5	10	5.0
Chemical	5	2.5	0	0.0
Withdrawal	11	5.5	7	3.5
Condom	33	16.5	7	3.5
Intrauterine device	25	12.5	2	1.0
Oral contraceptive	4	2.0	0	0.0
Other	0	0.0	1	0.5

in the year preceding the terminated pregnancy (Table 2). Few women used effective forms of contraception, such as oral contraceptives (2%) or intrauterine devices (13%). In the month of conception, 87% of women reported not using any form of contraception.

Among the 68 women who answered the questions on contraceptive practices, the main reasons cited for not using contraception were lack of any contraceptive education (60%), unavailability or elevated cost of contraceptives (15%), and medical contraindications (12%). The vast majority of the interviewed women (90%) requested more information on contraceptive methods.

Discussion

The number of reported abortions per woman among parous Armenian women is aberrant by Western standards. Armenian

women who undergo induced abortion are almost totally without information on alternative methods of birth control. A national program to train physicians to provide family planning counseling is therefore of critical importance. Postabortion counseling and provision of family planning services should be an important component of health programs that serve Armenian women of reproductive age.

Armenian and other Eastern European women are suffering the consequences of family planning policies centered around induced abortion.⁸ Preventive contraceptive methods are rarely used. Modern contraceptives are difficult to obtain, owing to a lack of supplies and services, the resistance of physicians, and the absence of women's advocacy groups to press for change. A public information campaign on alternative contraceptive methods would need to be accompanied by wider availability of and access to contraceptive supplies if it were to be successful.

A limitation of this research is that it fails to provide a comprehensive overview of the prevalence, causes, and consequences of induced abortion in Armenia. A multicenter project is currently under way that will provide a broader and deeper understanding of the impact of the issue, including data on the morbidity associated with induced abortion and resources spent within hospitals to maintain abortion services. Nonetheless, because these data will not be available for several years, the present report serves notice of the potential problems engendered by family planning policies centered around induced abortion.

The historic decline of induced abortions—both legal and illegal—in Western countries has been an important component of the observed improvement in women's health.^{1,9} The substitution of effective preventive contraceptives for abortion in Eastern European countries is a realistic goal because of their developed medical infra-

structures and because women in these countries have a relatively high level of education.

Current family planning policies based on induced abortion in Armenia and other Eastern European countries need to be critically evaluated. The full extent of such policies' adverse health effects and their associated economic costs requires better documentation. In the absence of an informed family planning policy, Eastern European women will continue to suffer preventable health consequences and scarce health resources will be inappropriately targeted. □

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Anemia in Young Children of the Muynak District of Karakalpakstan, Uzbekistan: Prevalence, Type, and Correlates

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Introduction

Uzbekistan is 1 of 5 Central Asian republics that gained their independence with the breakup of the former Soviet Union. The population boasts universal literacy, with high rates of fertility (3.73 children per woman) and infant mortality (53.2 per 1000 live births).¹ Independence has resulted in runaway inflation,²⁻⁴ escalating unemployment, and increasing poverty.⁵ A typical meal, especially for those in rural areas, consists of bread and potatoes with tea. Green vegetables, fruit, milk, and meat are beyond financial reach.⁶

In 1992, the Uzbek Ministry of Health Protection identified anemia among young children as a public health concern. The Ministry of Health Protection invited Crosslink International, a nongovernmental organization, to collaborate on a population-based study of anemia. The district of Muynak, located in the Aral Sea Basin in northern Uzbekistan, was selected for study. Under the

Soviet regime, water was siphoned from the Aral's 2 feeder rivers for irrigation to support an intensive cotton monoculture. Now the

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Note. Variant spellings for Muynak include *Muinak*, *Mujnak*, and *Muinoq*. The Board of Geographic Names has recently approved the new official Uzbek spelling *Muynoq*. The new official Uzbek spelling of Karakalpakstan is *Qoraqalpoghiston*; however, this spelling has not yet been approved by the Board.

ABSTRACT

Objectives. This study examined prevalence and correlates of anemia in the Muynak District of Uzbekistan, an area of rapidly changing social and economic conditions following the collapse of the Soviet Union.

Methods. Questionnaire data and blood samples were collected on a random sample of 433 children aged 1 through 4 years.

Results. The prevalence of anemia ranged from 89% in 1-year-olds to 48% in 4-year-olds. Correlates for anemia included younger age, a communal water source, and a history of pica.

Conclusions. Anemia is a widespread problem in young children in this district. An aggressive attempt to reverse this problem is needed. (*Am J Public Health*. 1998;88:805-807)